



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/786,744	08/20/2001	Martin Hammarstrom	203517US2PCT	5157
22850	7590	08/25/2005	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			KIM, JUNG W	
			ART UNIT	PAPER NUMBER
			2132	

DATE MAILED: 08/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/786,744

Applicant(s)

HAMMARSTROM ET AL.

Examiner

Jung W. Kim

Art Unit

2132

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 July 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-8,10-14 and 16-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 21 and 22 is/are allowed.
- 6) ☒ Claim(s) 1,3,4,6-8,11-14,16-20 and 23-28 is/are rejected.
- 7) ☒ Claim(s) 5 and 10 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. This Office action is in response to the amendment filed on July 6, 2005.
2. Claims 1, 3-8, 10-14 and 16-28 are pending.
3. Claims 1, 3-8, 10-14, 16-19 are amended.
4. Claims 21-28 are new.
5. Claims 2, 9 and 15 are canceled.
6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Response to Amendment

7. The objection to claims 1 and 18 are withdrawn as the amendments overcome the objections.
8. The 112/2nd rejections to claims 1-20 are withdrawn as amendments overcome the 112/2nd rejections.

Response to Arguments

9. After further consideration of the amendment to the independent claims (particularly the subject matter of claim 2 and 9 being incorporated into claims 1 and 8), it has been found that the limitation of the particular IP data packet being a ping-packet is anticipated by the Crichton prior art. As disclosed in applicant's specification, a ping service is first characterized on pg. 1:

When an attempt is made by a computer to contact another computer, difficulties are sometimes experienced in obtaining a reply from the computer. In these circumstances, it is possible to use a Ping service to determine whether, or not, the computer is connected to the network. In operation, the Ping service sends a message, in the form of a data packet, to the computer, with which contact is required, and when the computer receives the data packet it sends it back to the sender. If the data packet is not returned, then the sender will be aware that the computer is not connected to the network. In Windows, the Ping service can be run from DOS (pg. 1, 3^d paragraph).

10. In view of this background disclosure, the limitation of the particular IP data packet being a ping-packet is anticipated by the packet messages defined by Crichton on col. 6:47-7:38. These packet messages perform the same connectivity service performed by the Ping service defined in the Applicant's specification. Hence, Applicant's arguments that the 103(a) rejections of claims 2, 9, 13-14 and 16-19 are improper are moot; Crichton alone anticipates the subject matter of these claims.

Claim Rejections - 35 USC § 112

11. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

12. Claims 27 and 28 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) introduces new subject

Art Unit: 2132

matter which was not disclosed in the specification; the term "internet control message protocol" is never mentioned in applicant's specification.

13. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

14. Claim 23 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

15. Claim 23 recites the limitation "the firewall" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Specification

16. Claims 17-20, 27 and 28 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The text as to whether a claim is a proper dependent claim is that it shall include every limitation of the claim from which it depends (35 U.S.C. 112, fourth paragraph) or in other words that it shall not conceivably be infringed by anything which would not also infringe the basic claim. MPEP 608.01(n).III. Regarding the claims in question, claim 17 defines an IC-breaker adapted for use with the apparatus defined in claim 13; claim 18 defines an IC-breaker configured to be used with apparatus as defined in claim 13; claim 19

defines a transmission system configured to transmit IP data packets, the system including an IP-network protected by a firewall and the system includes an apparatus as defined in claim 13; claim 20 defines a communications system including a transmission system as defined in claim 1; claim 27 defines a transmission system according to claim 1, wherein the particular type IP data packet is an ICMP; claim 28 defines a transmission system according to claim 8, wherein the particular type IP data packet is an ICMP. None of these claims includes each and every limitation of their parent claims (with respect to claims 27 and 28, both of these claims can be infringed by another wherein the other uses a particular IP data packet that is an ICMP but not a ping packet).

Claim Rejections - 35 USC § 102

17. Claims 1, 3, 4, 6, 8, 11, 13, 14, 16-20 and 24-28 are rejected under 35 U.S.C. 102(e) as being anticipated by Crichton et al. U.S. Patent No. 6,104,716 (hereinafter Crichton).

18. As per claim 1, Crichton discloses a transmission system configured to transmit IP data packets, comprising:

- a. an IP network; a protected network protected by a firewall configured to block incoming traffic to the protected network; a first IC-breaker; and a second IC-breaker; wherein the first and second IC breakers are configured to open the

firewall to allow the IP data packets to be transferred through the firewall to the protected network (col. 2:32-55; fig. 10);

b. the first IC-breaker is located on a IP network side of the firewall and the second IC-breaker is located on a protected network side of the firewall, and the firewall is transparent to a particular type IP data packet, configured to communicate between the first and second IC-breakers through the firewall by using the particular type IP data packet (fig. 10, reference nos. 26, 213, 223);

c. the first IC-breaker is configured to receive the IP data packets from the IP network, the IP data packets intended for the protected network, and the first IC-breaker is configured to send the particular type IP data packet to the second IC-breaker after reception of the particular type IP data packet; and the first IC-breaker is further configured to open the firewall for a time period at reception of a returned particular IP data packet from the second IC-breaker, and the returned particular IP data packet is sent before the firewall opens through the firewall to the second IC-breaker, and the second IC-breaker is configured to send the particular type IP data packet to the protected network after receiving the particular type IP data packet; and the particular IP data packet is a ping-packet (col. 1:47-58; 6:48-7:38; 9:13-28; two operations are defined for the SOCKS protocol: CONNECTION_REQUEST [requesting a connection with the application server] and CONNECTION_ACT [establishing an inbound connection after a CONNECT_REQUEST request] both are IP packet requests which enable transparent access across a firewall; the message packets defined in col. 6:47-

7:38 identifies, inter alia, connectivity within the network, which corresponds to the limitation wherein the particular IP data packet is a ping-packet).

The aforementioned cover the limitations of claim 1.

19. As per claims 3, 4 and 6, the rejection of claim 1 under 35 U.S.C. 102(e) is incorporated herein. In addition, the firewall is configured to be transparent to IP-communication through the firewall from a protected network side to an IP network side thereof, and during the time period, open to IP-communication through the firewall from the IP network side to the protected network side thereof (fig. 7, ref. nos. 701 and 714 and related text); the first IC-breaker is configured, on receipt of an IP data packet, to store the particular type IP data packet and to send the stored IP data packet through the firewall to the second IC-breaker, when the firewall has been opened (fig. 10, ref. nos. 26, 213, 223; server proxies necessarily temporarily stores IP data packets forwarded and received through a firewall); the protected network is a LAN (fig. 10, "INTRANET1" and related text). The aforementioned cover the limitations of claims 3, 4 and 6.

20. As per claims 8 and 11, they are claims corresponding to claims 1, 3, 4 and 6, and they do not teach or define above the information claimed in claims 1, 3, 4 and 6. Therefore, claims 8 and 11 are rejected as being anticipated by Crichton for the same reasons set forth in the rejections of claims 1, 3, 4 and 6.

Art Unit: 2132

21. As per claims 13, 14 and 16-18, they are claims corresponding to claims 1, 3, 4 and 6, and it does not teach or define above the information claimed in claims 1, 3, 4 and 6. Therefore, claims 13, 14 and 16-18 are rejected as being anticipated by Crichton for the same reasons set forth in the rejections of claims 1, 3, 4 and 6.

22. As per claim 19, the rejection of claim 13 under 35 U.S.C. 102(e) is incorporated herein. In addition, the apparatus of claim 13 is included in a transmission system configured to transmit IP data packets, the system including an IP-network protected by a firewall. Fig. 4.

23. As per claim 20, the rejection of claim 1 under 35 U.S.C. 102(e) is incorporated herein. In addition, the transmission system is a part of a communications system. Col. 2:52-55.

24. As per claims 24-26, the rejections of claims 1, 8 and 14 are incorporated herein. (supra) In addition, the period of time is at least a duration of a transmission of the IP data packets through the firewall by the first or second IC breaker (by virtue of the tunnel created for the submission of the IP data packets through the firewall).

25. As per claims 27 and 28, the rejections of claims 1 and 8 are incorporated herein. (supra) In addition, the particular type IP data packet is an internet control message

protocol packet ICMP (col. 6:47-7:38; the message packets are error, control and informational messages).

Claim Rejections - 35 USC § 103

26. Claims 7 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crichton in view of Halsall Data Communications, Computer Networks and Open Systems Chapter 10 "Broadband Multi-service Networks" (hereinafter Halsall).

27. As per claim 7, the rejection of claim 1 under 35 U.S.C. 102(e) is incorporated herein. Crichton does not expressly disclose the system is an ATM network, configured to transmit IP data packets. Halsall discloses ATM networks as a hybrid network that can transmit a plurality of media types by implementing a single cell size. Crichton, pg. 568, section 10.3 "Cell-based networks". It would be obvious to one of ordinary skill in the art at the time the invention was made for the transmission system to be an ATM network since it is desirable to enable efficient transport of both normally transmitted data (email), which are switched by means of variable length frames, and time sensitive data (digitized voice; video streaming), which are switched by priority time designations, both being common types of services handled between two companies connected by a network. Halsall, pg. 568, 3rd full paragraph; Crichton, fig. 10. The aforementioned cover the limitations of claim 7.

28. As per claim 12, it is a claim corresponding to claims 1, 3, 4, 6 and 7, and it does not teach or define above the information claimed in claims 1, 3, 4, 6 and 7. Therefore, claim 12 is rejected as being rejected over Crichton in view of Halsall for the same reasons set forth in the rejections of claims 1, 3, 4, 6 and 7.

Allowable Subject Matter

29. Claims 5 and 10 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

30. Claims 21 and 22 are allowed.

31. Claim 23 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

Communications Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jung W. Kim whose telephone number is 571-272-3804. The examiner can normally be reached on M-F 9:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Art Unit: 2132

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).



August 19, 2005

Jung W Kim
Examiner
Art Unit 2132



GILBERTO BARRON JR.
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100